

Amendments to the Claims

Please amend the claims as follows:

Listing of the Claims:

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (currently amended) A manufacturing method of a diamond-coated silicon comprising the steps of;

(a) manufacturing a silicon substrate having a thickness of 500 μm or less, a width of 10mm to 150mm, and a length of 1m to 300m, by a plate-like crystal growth process, said plate-like crystal growth process selected from the group consisting of an EFG process, a string ribbon process and a dendritic web process;

(d) loading said silicon substrate into a first vacuum chamber, where the pressure is controlled at least once by said

first vacuum chamber, and said first vacuum chamber is separate from a chemical vapor deposition device;

(e) ~~a step for~~ coating the manufactured silicon substrate at least partially with electrically conductive diamond continuously or semi-continuously by a chemical vapor deposition process by loading said silicon substrate into a chemical vapor deposition device;

(f) loading said silicon substrate into a second vacuum chamber, where the pressure is controlled at least once by said second vacuum chamber, and said second vacuum chamber is separate from said chemical vapor deposition device;

(g) unloading the diamond coated silicon substrate from said second vacuum chamber.

7. (canceled)

8. (canceled)

9. (canceled)

10. (canceled)

11. (currently amended) The manufacturing method of a diamond-coated silicon according to claim 6, further comprising, between the steps of, the step (a) of manufacturing a silicone

substrate, and the step (d) of loading said silicon substrate
into a first vacuum chamber,

(b) a step for winding the silicon substrate in a drum
with a diameter of 50mm or more;

(c) a step for supplying the wound silicon substrate
to a ~~chemical vapor deposition device~~ said first vacuum chamber;
and

(h) winding the diamond coated silicon with the diamond
coated face outward after the step (f) of loading said silicon
substrate into said second vacuum chamber.

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

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19. (canceled)

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21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (canceled)

26. (canceled)

27. (canceled)

28. (canceled)

29. (canceled)

30. (canceled)

31. (new) The manufacturing method of a diamond coated silicon according to claim 6, wherein said step (d) of loading said silicon substrate into said first vacuum chamber and said step (f) of loading said silicon substrate into said second vacuum chamber, including:

an air-sealing system made from a rubber damper;
said damper comprising two rubber plates with an overlapped portion; and
said silicon substrate being held between said overlapped portion.

32. (new) The manufacturing method of a diamond coated silicon according to claim 6, wherein said chemical vapor deposition process being a hot filament chemical vapor deposition process, where the filaments being disposed in right angle to the longitudinal direction of the silicon substrate.